IN THE CLAIMS

1. - 48. (Canceled)

49. (Currently Amended) A method for operating a high voltage rotating electric machine, comprising steps of:

enclosing an electric field in a winding when the high voltage rotating electric machine is in operation;

cooling the stator to a temperature T1 when the high voltage rotating electric machine is in operation; and

heating the stator to a temperature T2 when the high voltage rotating electric machine is not in operation, wherein

said winding ~~including~~ includes an insulated electric conductor comprising at least one current carrying conductor, a first layer surrounding the at least one current carrying conductor, a solid insulation layer surrounding the first layer, and a second layer surrounding the solid insulation layer, and

said high voltage rotating electric machine ~~including~~ includes a stator, with a stator core having slots and the winding arranged in a plurality of slots in the stator core.

50. (Previously Presented) A method according to Claim 49, wherein:

the temperature T2 is substantially equal to the temperature T1.

51. (Previously Presented) A method according to Claim 49, wherein:

the temperature T2 is lower than the temperature T1.

52. (Previously Presented) A method according to Claim 51, wherein:

53. (Previously Presented) A method according to Claim 51, wherein:

the temperature T2 is lower than the temperature T1 by an inclusive differential range of 0-10 C.

54. (Previously Presented) A method according to Claim 49, wherein:

the winding is installed in the plurality of slots of the stator during assembly of the machine with play so as to accommodate an expected thermal expansion of the winding during operation.

55. (Previously Presented) A method according to Claim 49, wherein:

the winding, during assembly of the machine and before being installed in the slots of the stator core, is mechanically deformed and is configured to regain a non-deformed state when installed so as to bear on a wall of the plurality of slots.

56. (Previously Presented) A method according to Claim 49, wherein:

the winding, during assembly of the machine and before installation in the slots of the stator, is cooled so as to undergo a thermal shrinkage, and is configured to regain an original shape upon heating so as to bear on a wall of the plurality of slots.

57. (Previously Presented) A method according to Claim 49, further comprising a step of:

preheating the stator to a temperature T3 prior to an initial operation of the high voltage rotating electric machine.

58. (Previously Presented) A method according to Claim 57, wherein:

the temperature T3 substantially corresponds to a predicted operating temperature T0 of the stator.

59. (Previously Presented) A method according to Claim 57, further comprising a step of:

initiating operation of the machine once the stator has reached a temperature equal to the temperature T3.

60. (Previously Presented) A method according to Claim 57, wherein:

the temperature T3 is lower than the predicted operating temperature T0 of the stator.

61. (Previously Presented) A method according to Claim 57, wherein:

the temperature T3 is lower than the predicted operating temperature T0 by a differential range inclusive of 0-20 C.

62. (Previously Presented) A method according to Claim 57, wherein:

the temperature T3 is lower than the predicted operating temperature T0 of the stator by a differential range inclusive of 0-10 C.

63. (Previously Presented) A method according to Claim 49, wherein:

the stator core has a duct, with an expandable conducting means disposed in the duct configured to transport at least one of a heating operational medium and a cooling operational medium.

64. (Previously Presented) A method according to Claim 63, further comprising a step of:

expanding the expandable conducting means so as to press the expandable conducting means against an inside wall of the duct and to obtain a heat transfer contact, wherein said expanding step is prior to an initial operation of the high voltage rotating electric machine.

65. (Previously Presented) A method according to Claim 63, wherein:

the expandable conducting means is coated with a fusible adhesive agent before insertion into the plurality of ducts.

66. (Previously Presented) A method according to Claim 65, wherein:

the fusible adhesive agent comprises a filler with a predetermined thermal conductivity.

67. (Previously Presented) A method according to Claim 64, wherein:

said expanding step includes simultaneously subjecting the expandable conducting means to a pressure and a heat so as to cause the expandable conducting means to bear on the inside wall of the duct, to melt the fusible adhesive agent so as to essentially fill a plurality of cavities between the expandable conducting means and the inside wall of the duct, and to secure the expandable conducting means to the inside wall of the duct.

68. (Previously Presented) A method according to Claim 63, wherein:

the expandable conducting means, before being inserted in the duct, is deformed radially to a diameter smaller than a diameter of the duct.

69. (Currently Amended) A method according to Claim 49, wherein:

an expandable conducting means configured to transport at least one of a cooling operational medium and a heating operational medium is disposed ~~into~~ in a plurality of cavities formed between a plurality of turns of the winding.

70. (Previously Presented) A method according to Claim 69, further comprising a step of:

expanding the expandable conducting means so as to clamp the winding within the plurality of slots in the stator core.

71. (Previously Presented) A method according to Claim 70, wherein:

said expanding step includes controlling the expansion so as to deform the expandable conducting means into a profile substantially corresponding to a geometric cross section of the plurality of cavities.

72. (Previously Presented) A method according to Claim 71, wherein:

the profile is triangular.

73. (Previously Presented) A method according to Claim 70, wherein:

said expanding step includes creating a vacuous condition.

74. (Previously Presented) A method according to Claim 70, wherein:

said expanding step includes feeding a pressurized fluid into the expandable conducting means.

75. (Previously Presented) A method according to Claim 70, wherein:

said expanding step includes substeps of

simultaneously subjecting the expandable conducting means to an overpressure and a heat, and

cooling the expandable conducting means while maintaining the overpressure.

76. (Previously Presented) A method according to Claim 70, wherein:

said expanding step includes circulating a heat conducting pressurized fluid within the expandable conducting means.

77. (Previously Presented) A method according to Claim 76, wherein:

the heat conducting pressurized fluid is the same as the at least one of the cooling operational medium and the heating operational medium.

78. (Previously Presented) A method according to Claim 69, wherein:

the cooling operational medium and the heating operational medium are the same.

79. (Currently Amended) A high voltage rotating electric machine, comprising:

a stator;

a stator core having slots;

a winding arranged in a plurality of slots in the stator core and having a plurality of winding turns ~~laying~~ lying adjacent to each other, said winding including an insulated electric conductor comprising at least one current carrying conductor, a first layer surrounding the at least one current carrying conductor, a solid insulation layer surrounding the first layer, and a second layer surrounding the insulation layer; and

a temperature control module, said temperature control module configured to cool the stator to a temperature T1 when the high voltage rotating electric machine is in operation and to heat the stator to a temperature T2 when the high voltage rotating electric machine is not in operation.

80. (Previously Presented) A high voltage rotating electric machine according to Claim 79, wherein:

the temperature control device includes a supervision system and at least one of a heating device and a cooling device.

81. (Previously Presented) A high voltage rotating electric machine according to Claim 79, wherein:

the temperature T2 is substantially equal to the temperature T1.

82. (Previously Presented) A high voltage rotating electric machine according to Claim 79, wherein: the temperature T2 is lower than the temperature T1.

83. (Previously Presented) A high voltage rotating electric machine according to Claim 82, wherein:

the temperature T2 is lower than the temperature T1 by a differential range inclusive of 0-20 C.

84. (Previously Presented) A high voltage rotating electric machine according to Claim 82, wherein:

the temperature T2 is lower than the temperature T1 by a differential range inclusive of 0-10 C.

85. (Previously Presented) A high voltage rotating electric machine according to Claim 80, wherein:

the supervision system is configured:

to measure a stator temperature before operating for a first time,

to control the at least one of a cooling device and a heating device so that the stator, before operating for the first time, is heated to a temperature T3, and

to prevent operation of the high voltage rotating electric machine before the stator temperature equals a temperature T3.

86. (Previously Presented) A high voltage rotating electric machine according to Claim 85, wherein:

the temperature T3 corresponds to a predicted stator operating temperature T0.

87. (Previously Presented) A high voltage rotating electric machine according to Claim 85, wherein:

the temperature T3 is lower than the predicted stator operating temperature T0.

88. (Previously Presented) A high voltage rotating electric machine according to Claim 87, wherein:

the temperature T3 is lower than the predicted stator operating temperature T0 by a differential range inclusive of 0-20 C.

89. (Previously Presented) A high voltage rotating electric machine according to Claim 87, wherein:

the temperature T3 is lower than the predicted stator operating temperature T0 by a differential range inclusive of 0-10 C.

90. (Previously Presented) A high voltage rotating electric machine according to Claim 87, wherein:

the winding is configured so as not to be secure in the stator slots before the stator temperature equals a temperature T3.

91. (Previously Presented) A high voltage rotating electric machine according to Claim 79, further comprising:

an expandable conducting means configured to transport at least one of a cooling operational medium and a heating operational medium; and

a duct in the stator core.

92. (Previously Presented) A high voltage rotating electric machine according to Claim 91, wherein:

the expandable conducting means is configured to expand under heat and pressure so as to press against an inside wall of the duct in the stator core.

93. (Previously Presented) A high voltage rotating electric machine according to Claim 91, wherein:

the expandable conducting means is coated with a layer of a fusible adhesive agent.

94. (Previously Presented) A high voltage rotating electric machine according to Claim 93, wherein:

the fusible adhesive agent contains a thermally conductive filler.

95. (Previously Presented) A high voltage rotating electric machine according to Claim 91, wherein:

the expandable conducting means is simultaneously subjected to overpressure and heat so as to press the expandable conducting means against a wall of the duct, to melt the fusible adhesive agent, and to essentially fill a plurality of cavities between the expandable conducting means and the wall of the duct.

96. (Previously Presented) A high voltage rotating electric machine according to Claim 91, wherein:

the expandable conducting means, before being inserted in the duct, is deformed radially to a diameter smaller than a diameter of the duct.

97. (Previously Presented) A high voltage rotating electric machine according to Claim 79, further comprising:

an expandable conducting means for transporting at least one of a cooling operational medium and a heating operational medium.

98. (Previously Presented) A high voltage rotating electric machine according to Claim 97, wherein:

the expandable conducting means is inserted into a plurality of cavities which are formed between the plurality of winding turns lying adjacent to each other, and is expanded so as to clamp the windings within the plurality of slots in the stator core.

99. (Previously Presented) A high voltage rotating electric machine according to Claim 97, wherein:

the expandable conducting means has a profile that substantially corresponds to a geometric cross section of the plurality of cavities.

100. (Previously Presented) A high voltage rotating electric machine according to Claim 99, wherein:

the profile is triangular.

101. (Previously Presented) A high voltage rotating electric machine according to Claim 97, wherein:

the expandable conducting means is inserted in the plurality of slots of the stator core in a vacuum.

102. (Previously Presented) A high voltage rotating electric machine according to Claim 98, wherein:

the expandable conducting means is expanded with a pressurized fluid.

103. (Previously Presented) A high voltage rotating electric machine according to Claim 98, wherein:

the expandable conducting means is first simultaneously heated and subjected to an overpressure, and then cooled while retaining the overpressure.

104. (Previously Presented) A high voltage rotating electric machine comprising:

a stator;

a winding disposed in slots in the stator including at least one current carrying conductor, a first semiconductor layer surrounding the current carrying conductor, a solid insulation layer surrounding the first semiconductor layer, and a second semiconductor layer surrounding the solid insulation layer;

means for cooling the stator to a temperature T1 when said machine is in operation; and

means for heating the stator to a temperature T2 when said machine is not in operation.